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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/099,847      | 03/14/2002  | Yao-Hao Chang        |                     | 4421             |

25859            7590            09/02/2003  
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[REDACTED] EXAMINER

PAK, SUNG H

[REDACTED] ART UNIT      [REDACTED] PAPER NUMBER

2874

DATE MAILED: 09/02/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                         |                  |
|------------------------------|-------------------------|------------------|
| <b>Office Action Summary</b> | Application N .         | Applicant(s)     |
|                              | 10/099,847              | CHANG, YAO-HAO   |
|                              | Examiner<br>Sung H. Pak | Art Unit<br>2874 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on \_\_\_\_\_.
- 2a) This action is FINAL.      2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-7 is/are pending in the application.
  - 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) 1-6 is/are allowed.
- 6) Claim(s) 7 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.
 

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) The proposed drawing correction filed on \_\_\_\_\_ is: a) approved b) disapproved by the Examiner.
 

If approved, corrected drawings are required in reply to this Office action.
- 12) The oath or declaration is objected to by the Examiner.

#### Priority under 35 U.S.C. §§ 119 and 120

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
  - a) The translation of the foreign language provisional application has been received.
- 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                  | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: <i>Brian Healy</i>                       |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chen et al (US 2003/0048978 A1) in view of Fant et al (US 2003/0012481 A1).

Chen et al reference discloses an optical switch with all the limitations set forth in the claims, except it does not teach the use of indicators displaying different colors according to the condition of the switching means. Specifically, Chen et al discloses: plurality of input and output fibers attached to input and output collimators (Fig. 1); switching means moveably positioned between the input and output collimators (Fig. 1).

However, Fant et al reference discloses an optical switching system having indicator lights for monitoring the state of each switching means (Fig. 3,5 and paragraph 0023-0026). Fant et al reference discloses that indicators are advantageous because it allows for a device operator to easily identify equipment malfunction. Therefore, it would have been obvious to a person of ordinary skill in the art to modify Chen et al device to have monitoring indicators as claimed. It would have been desirable to have a device that notifies its user any equipment malfunction.

***Allowable Subject Matter***

Claims 1-6 are allowed.

The following is a statement of reasons for the indication of allowable subject matter: an optical switching device having input fibers and output fibers coupled to collimators, a pivoting prism having first and second states for altering the transmission path of the optical signals between the input and output fibers is known in the art. See for example, Tsai (US 5,642,446), Chen et al (US 2003/0048978 A1), Liao et al (US 2003/0081884 A1), Li et al (US 6,215,919 B1).

However, none of the prior art fairly teaches or suggests such an optical switch further comprising, *inter alia*, plurality of input and output indicators, wherein first and second input indicators take on first and second predetermined colors and first and second output indicators take on first and second colors, respectively, when the prism moves out of the optical signal path; wherein the first and second input indicators take on first and second predetermined colors and the first and second output indicators take on second and first colors, respectively when the prism moves into the optical signal path as claimed in the independent claims 1 and 4.

***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Tsai (US 5,642,446), Liao et al (US 2003/0081884 A1), Li et al (US 6,215,919 B1) disclose optical switches comprising movable prisms.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sung H. Pak whose telephone number is (703) 308-4880. The examiner can normally be reached on Monday - Thursday : 6:30am-5:00pm.

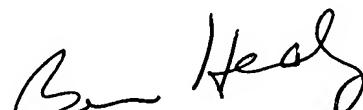
The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.



sp

Sung H. Pak  
Examiner  
Art Unit 2874

  
Brian Healy  
Primary Examiner